The Maryland Fruit Grower

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THE 1937 OUTLOOK

Apples—The 1937 Agricultural Outlook for Maryland, prepared by Mr. A. B. Hamilton, and published by the University of Maryland Extension Service, predicts a slow downward trend in apple production in Maryland, from a long-time view. There has been a reduction of 122 million trees since 1910, in the country as a whole, and a reduction of 618,600 trees in Maryland in the same length of time. It is reported that new plantings are tending to shift from the mountain section to the western part of the Piedmont Plateau.

The Virginia outlook states that in 1899, apples made up 75% of the family food supply, and in 1919 it had dropped to 33%, and at present, about 16% of the family fruit supply is furnished by apples. The report predicts a 1937 crop in Virginia comparable to that of 1935, if weather is favorable. The apple grower can look for increased competition in both foreign and domestic markets, due to better quality and better packaged apples. Citrus fruits will also offer considerable competition.

Peaches—The production of peaches in the United States is expected to remain fairly constant during the next five years, and is not considered in excess of market requirements. There is still a decline in number of peach trees, due to winter injury in the past few years, but there is considerable planting going on. In some states there has been considerable planting of new orchards on undesirable sites. The peach crop in the United States averaged about 46 million bushels in the 1932-36 period, and it is estimated that a five million bushel increase would not be excessive for market requirements. In Maryland, the outlook report states, there was a decline of 236,300 peach trees, from 1930 to 1935.

FRUIT TREE AND PRODUCTION CENSUS

The 1935 Federal Farm Census, issued by the U. S. Bureau of the Census, and covering the period 1930-35 shows considerable increase in number of orange and grapefruit trees, marked decrease in number of apple and peach trees, and moderate decrease in number of pear trees. A summary, taken from "Pomological Pointers" of Connecticut Pomological Society reads as follows:

Apples—From the standpoint of acreage apples occupy more area than any of the other fruits, though they yielded ground by showing a 14 per cent decline in the number of trees in the five-year period.

The total number of farm apple trees in 1935 numbered 100,054,047, of which about one-sixth were non-bearing. The production in 1934 amounted to 124,236,768 bushels, or an average of 1.5 bushels per bearing tree. Apples also are more generally grown than any of the other fruits,

here's PROOF!

YOUR LEDGER
Approximate Cost per 100 Gallons
Liquid Lime Sulfur, Wettable
Sulfur Combination .14
1 Gal Liquid Lime Sulfur .52
8 lbs of a Standard Wettable .66
Sulfur at 6½¢ per lb
VS
Total
2 lbs. Dry Lime Sulfur at 8½¢ per lb .17
8 lbs. 325 Mesh Sulfur at 3½¢ per lb .28
.45

A NEW, ECONOMICAL WAY TO MAKE SULFUR WETTABLE

DRY LIME SULFUR WITH 325 MESH SULFUR

WETTABLE

(PATENT APPLIED FOR)

DRY LIME SULFUR-325 MESH SULFUR

1937 SPRAYING SCHEDULE

No Scab No Russet No Foliage Injury	
Pre-Pink and Pink	3 lbs. Dry Lime Sulfur 5 lbs. 325 Mesh Sulfur
Calyx	2 lbs. Dry Lime Sulfur 4 lbs. 325 Mesh Sulfur
Additional Applications	1 lb. Dry Lime Sulfur 4 lbs. 325 Mesh Sulfur

THESE DILUTIONS ARE PER 100 GALLONS OF WATER

1 part Dry Lime Sulfur will make wettable up to 4 parts of 325 Mesh Sulfur

Add 3 lbs. of Sherwin-Williams Arsenate of Lead to each 100 gallons of spray when necessary.

A SCAB-CONTROLLING, NON-RUSSET, NON-INJURIOUS-TO-FOLIAGE SPRAY COMBINATION

Save your apple crop and your pocketbook by using this new Sherwin-Williams combination—Dry Lime Sulfur with 325 Mesh Sulfur—Wettable—instead of expensive wettable sulfur. Figure out for yourself as shown above. In addition to cutting your summer fungicide spray bill ONE-THIRD you will be assured of A-Grade apples.

This Spray Schedule Assures
FINE COLOR—FINE FINISH—HEALTHY FOLIAGE

This spray schedule and this new, economical way to make sulfur wettable with Sherwin-Williams Dry Lime Sulfur protects your crop against scab, against russet, and against foliage injury, thus assuring you of apples with a FINE FINISH and FINE COLOR.

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Write at once for the special folder which tells you how this new Sherwin-Williams combination mixes, sprays AND STICKS—and SAVES you fully ONE-THIRD of the cost of expensive wettable sulfur sprays.

THE SHERWIN-WILLIAMS CO.
Insecticide Department
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SPRAY AND DUST MATERIALS

having been reported on 2,358,781 farms, or slightly more than one-third of all farms in 1935. The state of Washington, with 30,997,021 bushels, or one-fourth of the United States total in 1934, led all states in production by a wide margin.

New York was second, with 13,555,726 bushels. In number of trees, New York was first, followed in order by Virginia, Pennsylvania, Michigan and Ohio.

In new plantings, Ohio was first, with 1,431,839 trees, and was closely followed by New York, Pennsylvania, Virginia and Illinois.

Peaches—Peach trees also declined during the five years as on January 1, 1935, the total number of peach trees was 67,069,052, or about 15 per cent below the number on April 1, 1930.

Production in 1934 was 44,747,813 bushels, or slightly above the production for 1929. California reported a production of 17,833,226 bushels, or two-fifths of the United States production, in 1934.

Georgia was second, with 5,410,127 bushels. New plantings were heaviest in Texas, Georgia and Michigan.

Losses were also reported in thenumber of trees from 1930 to 1935 of 9 per cent for pears.

ORCHARD SOIL CONSERVATION

Some changes in the soil conservation rulings this year have made the provisions of the Soil Conservation Act more attractive to fruit growers. It would be a good plan for growers to see their county agricultural agents in regard to soil conservation. Aside from whatever payments the grower may receive, it encourages growers to do things for their soil that are worth while.

CHANGES IN SPRAY CALENDAR

The spray calendar for 1937 suggests two changes in concentration of spray materials that may effect some improvement in the appearance of apples at harvest. The combinations of lime-sulphur and arsenicals and bordeaux mixture and arsenicals are the most reliable combinations for control of insect and disease pests under Maryland conditions. These combinations also cause injury to the fruit under some conditions. The spray service suggests that apple growers use lime-sulphur 1-50 instead of 1-40 for summer applications and bordeaux mixture 2-4-100 instead of 4-8-100.

Orchardists who have had trouble controlling bitter rot should continue to use 4-8-100 bordeaux mixture until this disease has been thoroughly controlled.

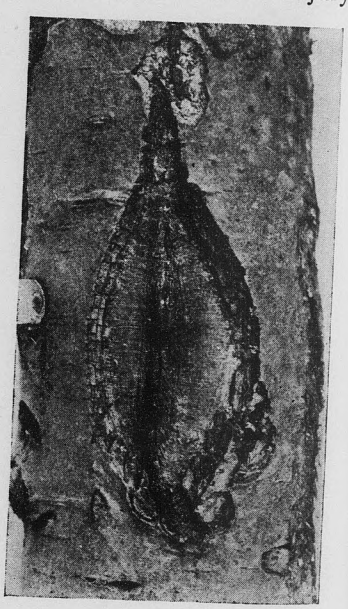
The spray service believes that the use of the lower concentration of lime-sulphur and bordeaux mixture will reduce spray injury, as well as effect some saving in the cost of spray materials.

For Sale—"Friend" 300-gallon tractor sprayer. Good condition. Used one season, and now located on an orchard at Hancock, Maryland. Has been replaced by stationary spray system. For full particulars write Locher & Company, Farm Department, Glasgow, Virginia.

PAINTING TREE WOUNDS

As a rule, it should not be necessary to paint pruning wounds under 2 or 2½ inches in diameter. Some growers have used common asphalt roofing paint for tree wounds, but in an orchard, recently, it was noted that there was not only considerable serious wood rot under the asphalt paint, but that San Jose scale was present, and was working over the tree from these places. The rot was probably caused by loosening of the paint as the wound healed, allowing continuous moisture to be held under the asphalt. The trees were not especially vigorous, which may account for the slow healing, and the resulting rot. Sodium silicate or water glass has been recommended as a good paint, but it never became popular. Common white lead and linseed oil paint is about as good as we have for painting tree wounds. However, there are some good patented wound dressings. If it is desired in black color, add lampblack. One important help in quick healing of wounds, is to make clean cuts, as closely as possible to the limb from which the branch is removed. Where cankers are cut from the bark, make a "stream-lined" cut at both top and bottom, to aid in quick healing. Oregon Extension Bulletin 485, published by Oregon Agricultural Extension Service, Corvallis, Oregon, discusses wound treatment and winter injury.

In cutting out bark cankers, a "streamlined" cut, pointed at top and bottom will heal more quickly.



Illustrations from "American Hortigraphs and Agronomical Review" by courtesy of American Cyanamide Company.

THOSE CULLS

Western growers have made war on culls, and although there was a law in Washington State forbidding sale of infested apples, nothing was done until last fall, when 1204 growers banded together as Union Fruit Producers, Inc., and deputized 10 inspectors to police highways and stores. Several peddlers and fruit handlers were fined $50.00. Storekeepers were warned, if it was their first offense, but the cull apples were squirted with kerosene.

If any culls were found on later inspection, a warrant was issued. If cull fruit was found at truck weighing stations, the trucker was allowed to haul it to a by-products plant, or if it was his first offense, he was allowed to re-condition the load, if it would pass grade requirements, all culls being sent to the by-products plant. This news was found in January 1937, "Better Fruit".

PROPOSED FRUIT GROWERS' TOUR

Mr. John T. Bregger, of Waynesboro, Pa., has asked that announcement be made of a tour which is being planned for fruit growers under auspices of The American Pomological Society. The trip will be made in special Pullman cars, and will last about three weeks. The tentative time is the last half of June and the first week in July. Plans are being made to stop at Grand Valley, Colorado; one or more California fruit sections; Rogue River and Hood River, Oregon; Yakima or Wenatchee Valley, Washington; and possibly Bitter Root Valley, Montana. No estimate of costs has been made, and plans are not yet final. Here is a good chance for a fine vacation trip at a low cost. You should write to Mr. Bregger for any further information, and also give him some idea of how many persons will be in your party. There will be no obligation on your part.

Can We Be Of Assistance?

East Central Fruit Growers Production Credit Association

Hagerstown, Maryland

Organized for benefit of Fruit Growers in their financial production operations

Organized under the Farm Credit Act of 1933 as a permanent institution for benefit of fruit growers in their financial production operation. Serves the states of Delaware, Maryland, Pennsylvania, Virginia and West Virginia.

OUR ANNUAL VISITOR

Codling moth larvae are snugly curled up in any rough places that they can find on or near an apple tree: in cracks, splintered, broken limbs, old unhealed pruning wounds, and under scales of bark. Scraping off this rough bark is a help, and burning these bark scrapings is even better. One grower has developed a burner by cutting out one end of an oil drum, setting this drum open end up, cutting a good-sized draft hole near the bottom, and thrusting two long pieces of pipe through the drum, near the top to serve as carrying handles. The bark scrapings are caught on burlap bags placed

around the tree base, dumped into the drum, and burned. The drum is easily carried along as the men move down the rows.

Anything that is done toward cleaning trash out of the orchard helps in moth control. Illinois Circular 443 tells us that the progeny of one pair of moths from overwintering larvae could damage 167 bushels of apples; those from a pair of first-brood larvae could damage about 6 bushels, while those from a pair of second-brood larvae could injure about a peck. Kill off that first brood. And, speaking of cleaning up, don't neglect that pruning brush clean-up. One grower, who is a little short on winter help, has his men gather the brush after each tree is pruned, and pile it in the middles. After the pruning is done, he goes through with a brush sweep on front of his tractor, and in less than two days, the brush is pushed to the pile, and burned.

ANOTHER INSECTICIDE

According to a recent press release, the U. S. Bureau of Entomology and Plant Quarantine has developed a thousand or so insecticides, in the past few years, but only three or four of them show any great promise, and these have not passed the necessary tests to allow them to be recommended for general use.

The most promising of these new discoveries is pheno-thiazine, a combination of carbon, hydrogen, nitrogen, and sulfur. In the Northwest, trials showed it to control codling moth better than lead arsenate. Its chief benefit was to keep down the number of stings on fruit, and the residue was less likely than lead or arsenic, to prove injurious. The serious trouble with the use of material is that it causes skin irritation to the spraymen, much resembling severe sunburn. It also has caused pale color on fruits, in some cases. This material is to be given further trial, before the Government chemists discard it.

Another material under test, is nicotine in combination with some "fixer" that will hold the nicotine in some form for the codling moth to be able to eat it. Mixing of nicotine sulfate and bentonite, a volcanic clay has given a useful form of spray that dries, leaving a fine mixture of dust and nicotine that is effective on young codling moth larvae. It is intended for use on early apples that require but few sprays, and cannot be washed. Some other work, using free nicotine and peat has given a nicotine compound that is insoluble in water, and will not wash off the fruit and foliage. Nicotine-oil combinations have been tried, and are successful in some sections, but cost, danger of burning, residues, etc., have complicated the use of these materials.

More work is being done with rotenone and pyrethrum, and calcium arsenate is being investigated chemically, since it has been found that many of the commercial forms seem to vary in solubility, and also that heat treatment of calcium arsenate, especially in the presence of steam, decreases its toxic effect on insects, and also decreases the foliage injury that this material causes. All of this work merely proves that there is considerable possibility that the chemists are going to find some suitable spray for codling moth, and it is only hoped that it will be some material well within the limits of the growers' spraying budget.

HAVE YOU READ THE ADVERTISEMENTS?

The NITROGEN FERTILIZER *that Feeds the Tree and Limes the Soil*

CORRECTS ACIDITY caused by sulphur sprays and decaying organic matter

Ask for Leaflet F-142

. . . . which tells you more about this NON-LEACHING, HIGH-NITROGEN, HIGH-LIME, GRANULAR FERTILIZER, and how to use it in growing . . . . bigger yields of better-quality fruit.

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*Reg. U. S. Pat. Off. and Principal Foreign Countries

Feeds the Tree Evenly Throughout Growing Season

FIRE BLIGHT

Cornell University Memoir 193, published August, 1936, reports some investigational work in causes of spread of fire blight on apples. The findings seem to indicate that large cankers are the important means of over-wintering the disease, rather than the small twig cankers. Splashing rains, various types of flying insects, ants, and sucking insects are means of spreading the disease. Some bacteria were found which stopped the spread of the disease (which is a bacterial disease) after it has become established. Zinc chloride treatment for cankers is not so satisfactory, as it kills the live bark. Cadmium sulfate solution is a little more desirable, but needs more experimental trials.

In Maryland, the severity of fire blight depends upon the weather conditions in the spring season. Eastern growers have not used disinfectants upon blight cankers, because of expense, and doubtful results. The use of 1-2-50 Bordeaux at time of full bloom has seemed to be beneficial in blight control, but it is added expense, and may not be necessary, as we cannot predict how severe blight may become in any year. Until more practical control is found, it still seems that cutting out of infected wood is the only control for fire blight. This disease is bad enough, but the cankers of other diseases that follow fire blight injury are even more serious.

U. S. GROWS AND EXPORTS MORE APPLES

The United States is the largest producer and exporter of apples in the world, according to the Bureau of Agricultural Economics. On an average, during the 5 years 1931-35, approximately 31 per cent of the world apple production of 500 million bushels was produced in the United States.

Of the average of 155 million bushels of apples produced in that 5-year period in the United States, the Bureau reports approximately 84 million bushels (54 per cent) were consumed as fresh fruit, about 6 million bushels (4 per cent) were canned, roughly 3 million bushels (2 per cent) were used for making brandy, about 7 million bushels (4.5 per cent) were dried and evaporated, and about 55 million bushels (35.5 per cent) were used for other apple products (including vinegar and cider), used on the farm, fed to stock, or left unharvested.

There are a total of roughly 450 million apple trees in the world, one-fourth of which are in the United States.

The trend of apple production in this country has been downward for several years, but world production outside the United States is on a slightly upward trend, particularly production of apples for dessert purposes.

World trade in apples in the last few years amounted to 33 million bushels, of which the United States supplied approximately one-third. The next most important exporter is Canada, supplying about one-fifth of the total exports.

U. S. Dept. Agr. Press Release—Feb., 1937.

On mules we find two legs behind
And two we find before.
We stand behind before we find
What the two behind before.

SPRING TIME

AND

PLANTING TIME

ARE JUST ABOUT HERE

THE WISE MAN

Plans and Plants for the Future

WE SPECIALIZE IN

APPLE and PEACH TREES

STRAWBERRY and RASPBERRY PLANTS

GRAPE VINES and ASPARAGUS PLANTS

We offer one of the most up-to-date and practical listings of new and improved fruits available to the planters today.

Increase your profits by planting only the best.

Our products are grown scientifically at a location generally recognized as a favored spot for the production of hardy and thrifty nursery stock. Our fruit trees are inspected yearly for trueness to name by the greatest authorities in the world on the identification of varieties by leaf and growth characteristics. Our stock is dug with the most modern digging equipment available.

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One of the East's largest Nurseries, Selling Direct to the Planters Awaits the Opportunity to Serve You. Send for our Complete Catalogue Today.

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PRINCESS ANNE, MARYLAND

SOMETHING DIFFERENT

Whether we know it or not, all of us have some hobby; something that we like to do beside our regular work. There are millions of hobbies and they are all fun to the fellows who work them. The following article is of interest because life is much better because of the hobbies mentioned. The last sentence of the article is full of encouragement.

The article was written by Francis Jenkins, a stenographer, who followed hobbies, and invented the moving picture projector, spiral twisted pasteboard cartons, a speed camera, and a system of television. He wrote:

Has it ever occurred to any of you that all great inventions have been the result of an avocation, a plaything during rest time from the task-weary monotony of regular employment?

The father of photography was an army officer; of the electric motor, a bookbinder's clerk. The inventor of the telegraph was a portrait painter; and of the Jacquard loom, a dressmaker. A farmer tinkered up the typewriter; a poet, the sewing machine; a cabinetmaker, the cotton gin; and a coal miner, the locomotive. The telephone was the "after-school" work of a teacher of the deaf; the disk talking machine, the night work of a clothing salesman; the wax-cylinder phonograph, of a lawyer's clerk; the typecasting machine, a groceryman.

A physician made the first pneumatic tire, because his little son was a wheel-chair invalid. The hand camera was invented by a bank clerk; the film roll, by a country preacher; the motion picture, by a stenographer. The steam automobile was the plaything of a photo-dryplate maker; the dry-blast steel process, the brain child of a preacher's son; the tunneling shield, of an editor; the stock ticker, a dentist. The long-distance telephone loading coils were figured out by a professor of mathematics. Bicycle repairmen made the first man-carrying airplane; a soldier, the wireless telegraph; and a druggist's clerk, the loud-speaker.

This has been the story of every great invention. Each has been the result of someone's riding a hobby, a kindly soul tinkering around in the woodshed perhaps with what the neighbors were pleased to call his "crazy" idea.

I have observed that a new thing always originates in a single mind, usually the brain of a poor man. It is not the product of great wealth and a great laboratory. Money only develops, it never originates; I guess because money doesn't work in a woodshed.

And that is very encouraging too, for I am led to hope that I may yet do something worth while myself if only I stay poor enough, long enough.

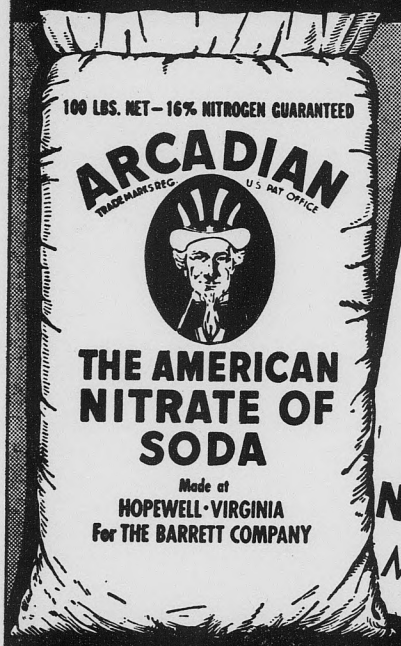
With regret we announce the passing of two of Maryland's fruit growers.

Anton Reier passed away at his home at Glen Arm. He was one of Maryland's veteran growers, long identified with horticultural developments in Baltimore County. His accomplishments as a fruit grower have left their mark in the county.

J. Orem Leiter of Ringgold, one of the younger fruit growers of the State, was taken away in the prime of life. He was both a fruit grower and general farmer, and a power for good in his neighborhood.

In the passing of these men, their communities are poorer for their departure. Fine fellows; true friends; good citizens; they will be sadly missed. Maryland can ill afford to lose men like these.

IT GIVES
MORE NITROGEN
FOR THE MONEY



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CELERY
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and it's the only
NITRATE OF SODA
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Make Lime Sulfur safer

and more effective with

SPRAY CATALIZER

Spreader—Sticker—Flocculator

This is the new sulfur spreader which has become such a sensation in the fruit growing world.

Pratt's Spray Catalizer should be used whenever lime sulfur or Sulfocide is used as a foliage spray.

Pratt's Spray Catalizer catalyzes or controls the polysulphides, reducing spray injury to a minimum. It prevents the formation of the black sludge (lead sulphide) which reduces the fungicidal action of the sulfur and releases water soluble arsenic, which is responsible for so much russeting of fruit and burning of foliage.

Pratt's Spray Catalizer partially flocculates lead arsenate for greater buildup and sticking quality of the poison on the fruit and foliage, with least runoff.

Pratt's Spray Catalizer costs no more than casein lime spreaders, but contains 60% of superfine sulfur, which increases to that extent the fungicidal property of the spray. It does not deteriorate with age so is always fresh.

Use 2 pounds only of the Spray Catalizer to 100 gallons. No lime is necessary or desirable.

Full descriptive literature on request.

B. G. Pratt Company

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